

## EAST Search History

| Ref # | Hits   | Search Query   | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|--------|--|---|------------------|---------|------------------|
| S1    | 198878 | chemical vapor deposition or \$2cvd  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | ON      | 2006/06/05 10:55 |
| S2    | 5303   | S1 and (ammonia or "nh.sub.3") same (silane or "sih.sub.4") same (nitride or SiN\$6)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | ON      | 2005/09/21 16:20 |
| S3    | 554    | S1 and ((ammonia or "nh.sub.3") same (silane or "sih.sub.4") same (nitride or SiN\$6) same (nitrogen or "n.sub.2") same sccm)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | ON      | 2005/09/21 11:44 |
| S4    | 1195   | S1 and ((ammonia or "nh.sub.3") same (silane or "sih.sub.4") same (nitride or SiN\$6) same (nitrogen or "n.sub.2") and sccm)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | ON      | 2005/09/21 11:44 |
| S5    | 189    | S4 and (showerhead or shower head)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | ON      | 2005/09/21 11:45 |
| S6    | 10     | ("5441768").URPN.  | USPAT   | ADJ              | ON      | 2005/09/21 11:55 |
| S7    | 19     | ("3874919"   "4110899"   "4268321"   "4333964"   "4398992"   "4729816"   "5306946"   "5441768"   "5472906"   "5679600").PN. OR ("6090686").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR                            | ADJ              | ON      | 2005/09/21 12:03 |
| S8    | 11     | ("5273920").PN. OR ("5441768").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR                            | ADJ              | ON      | 2005/09/21 12:23 |
| S9    | 22     | ("3549411"   "4342617"   "4688078"   "4851361"   "5166556"   "5382551"   "5422300"   "5468689"   "5541436"   "5670432"   "5683922"   "5707889"   "5739066"   "5851879"   "5939763"   "6051511"   "6090686"   "6093956"   "6110784"   "6174644"   "6297130").PN. OR ("6703690").URPN. | US-PGPUB;<br>USPAT;<br>USOCR                            | ADJ              | ON      | 2005/09/21 12:27 |

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|     |      |  |   |     |    |                  |
|-----|------|--|---|-----|----|------------------|
| S10 | 19   | ("4210470"   "4262631"   "4532695"   "4546540"   "4645683"   "4836885"   "5045346"   "5075743"   "5094984"   "5238869"   "5360754").PN. OR ("5468689").URPN. | US-PGPUB;<br>USPAT;<br>USOCR                            | ADJ | ON | 2005/09/21 12:47 |
| S11 | 4    | ("4563367"   "5134092"   "5468689"   "5539154").PN. OR ("6348419").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR                            | ADJ | ON | 2005/09/21 12:57 |
| S12 | 25   | ("3549411"   "3842490"   "4181564"   "4239587").PN. OR ("4342617").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR                            | ADJ | ON | 2005/09/21 13:16 |
| S13 | 4135 | S1 and (ammonia or "nh.sub.3") same (silane or "sih.sub.4") same (nitride or SiN\$6) and ((graded or layer\$2 or discontinuity or junction) with nitride)    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/21 13:18 |
| S14 | 189  | S1 and (ammonia or "nh.sub.3") same (silane or "sih.sub.4") same (nitride or SiN\$6) and ((graded or discontinuity or junction) with nitride)                | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/21 14:24 |
| S15 | 2    | "5629043".pn.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/21 14:55 |
| S16 | 2    | "4395438".pn.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/21 14:55 |
| S18 | 775  | bird\$1s beak  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/21 15:15 |
| S19 | 372  | S18 and silicon nitride  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/21 15:16 |
| S20 | 18   | S19 and ((silane or "sih.sub.4") same (ammonia or "nh.sub.3"))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/21 15:16 |

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|     |      |   |   |     |    |                  |
|-----|------|---|---|-----|----|------------------|
| S21 | 4767 | (ammonia or "nh.sub.3") same (silane or "sih.sub.4") same (silicon nitride or "si.sub.3" "n.sub.4")           | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/21 16:21 |
| S22 | 4062 | S21 and (chemical vapor deposition or \$2cvd)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/21 16:22 |
| S23 | 50   | S22 and ((showerhead or shower head or distribution plate) same heater)                                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/21 16:23 |
| S24 | 36   | S23 and ratio   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/21 16:33 |
| S25 | 2    | "5336640".pn.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/22 09:55 |
| S26 | 2    | "5872655".pn.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/22 11:33 |
| S27 | 2333 | 427/255.28,255.393,255.394,255.7. ccls.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/22 11:35 |
| S28 | 547  | S27 and (silicon nitride or "si.sub.3" "n.sub.4" or "si.sub.3n.sub.4")  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2005/09/22 11:36 |
| S29 | 936  | (chemical vapor deposition or \$2cvd) same (ammonia or "nh.sub.3") same (\$4silane or "sih.sub.4") same ratio | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/05 11:43 |
| S30 | 450  | (chemical vapor deposition or \$2cvd) same (ammonia or "nh.sub.3") with (\$4silane or "sih.sub.4") with ratio | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/05 11:49 |

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|     |      |   |   |     |    |                  |
|-----|------|---|---|-----|----|------------------|
| S31 | 279  | S29 and second near3 nitride  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/05 11:04 |
| S32 | 94   | S30 and second near3 nitride  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/05 11:04 |
| S33 | 33   | ("5041888").URPN.   | USPAT   | ADJ | ON | 2006/06/05 11:36 |
| S34 | 13   | S33 and second near3 nitride  | USPAT   | ADJ | ON | 2006/06/05 11:37 |
| S35 | 10   | S34 and ratio   | USPAT   | ADJ | ON | 2006/06/05 11:37 |
| S36 | 0    | (chemical vapor deposition or \$2cvd) same (ammonia or "nh.sub.3") with (\$4silane or "sih.sub.4") with ratio same graded | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/05 11:43 |
| S37 | 2    | (chemical vapor deposition or \$2cvd) same (ammonia or "nh.sub.3") same (\$4silane or "sih.sub.4") same ratio same graded | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/05 11:44 |
| S38 | 6    | (chemical vapor deposition or \$2cvd) and (ammonia or "nh.sub.3") same (\$4silane or "sih.sub.4") same ratio same graded  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/05 11:47 |
| S39 | 2188 | (bi or two or dual) layer\$3 with silicon nitride   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/05 11:48 |
| S40 | 447  | S39 same (chemical vapor deposition or \$2cvd)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/05 11:49 |
| S41 | 12   | S40 and (ammonia or "nh.sub.3") with (\$4silane or "sih.sub.4") with ratio  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/05 12:28 |
| S42 | 7    | semiconductor same trench with bottom with side with top with thick\$4 same deposit\$4                                    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/06 10:38 |

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|     |      |   |   |     |    |                  |
|-----|------|---|---|-----|----|------------------|
| S43 | 2039 | semiconductor same step coverage<br>same deposit\$4                                 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/06 10:39 |
| S44 | 407  | S43 same ratio  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/06 10:43 |
| S45 | 281  | semiconductor same step coverage<br>with ratio same deposit\$4                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/06 10:39 |
| S46 | 11   | S43 same ratio same silicon nitride<br>and (chemical vapor deposition or<br>\$2cvd) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2006/06/06 10:43 |